

NESMEYANOV, A.N.; SAZONOV, L.A.; SAZONOVA, I.S.

Chemical state of atoms formed in nuclear transformations. Uspekhi Khim.
22, 133-78 '53. (MLRA 6:3)
(CA 48 no.2:455 '54)

Sazonova, I.S.
USSR/Electricity - Semiconductors

G-3

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 7000

Author : Keyer, N.F., Roginskiy, S.Z., Sazonova, I.S.
Title : Electronic Phenomena in Semiconductor Catalysis

Orig Pub : Dokl. AN SSSR, 1956, 106, No 5, 859-861

Abstract : To investigate the degree of localization of the action of impurities and the roles of the "remote effect" and strict periodicity of the lattice in the presence of electron-hole equilibrium, experiments were made in which cations, having the same charge as the cations of the basic material and not having the characteristic properties of a donor or acceptor were introduced into the catalyst-semiconductor. Binary solid oxides of nickel were the subject of the investigation.

The catalytic activity was measured under static conditions at low pressure in vacuum. The results obtained confirm the decisive significance of the size of the charge on the action of the cation introduced into the lattice.

Card : 1/1

Inst. Phys. Chem, AS USSR

SAZONOVA, I S

4E2R

11400* (Russian.) Investigation on Catalytic Properties of Solid Solutions Based on Nickel Oxide. *Izvestia Akademii Nauk SSSR, Seriya Fizicheskaya*, v. 11, Feb. 1957, p. 183-191.

Chen
*11400**
Catalytic properties of solid solutions of NiO having electronic characteristics. The study of triple systems containing oxides of mono- and trivalent metals, gave an indication of the correlation between the electric and catalytic properties of catalysts.

Inst. Phys. Chem AS USSR *for RG-007*

SAZONOVA, I. S.,

"Oxidation of Carbon Monoxide on Protoxides of Nickel and its Solid Solutions,"
Moscow, 1958. (Dissertation presented and approved for the degree of Cand. Chem.
Sci.) AN SSSR, Inst. Phys. Chem.

66492

SOV/20-129-1-39/64

~~5(4)~~ 5.3300(A)

AUTHORS: Isayev, O. V., Margolis, L. Ya., Sazonova, I. S.

TITLE: The Mechanism of Propylene Oxidation to Acrolein on a Cuprous Oxide Catalyst

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol. 129, Nr 1, pp 141-144 (USSR)

ABSTRACT: On the basis of kinetic measurements the authors gave a scheme for the oxidation of propylene to acrolein (Ref 2). In the present investigation this scheme is revised by means of tagged atoms. Propylene tagged with radioactive carbon was prepared by dehydrogenating isopropyl alcohol at 400° over Al_2O_3 . After mixing with acrolein and oxygen the propylene thus prepared was oxidized on catalysts at atmospheric pressure. The catalysts contained 0.1 and 1% copper, respectively. Carborundum was used as carrier. The acrolein content in the reaction product was determined by the bromide-bromate method, and the propylene content and CO_2 by means of the gas analyzer type VTI. The radioactivities of CO_2 and acrolein were determined by measuring the

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66492

SOV/20-129-1-39/64

The Mechanism of Propylene Oxidation to Acrolein on a Cuprous Oxide Catalyst

activities of the barium carbonate and the acrolein 2,4-dinitro-phenylhydrazones precipitates, respectively. The experimental results are represented graphically in the figures 1-3 (Co_2 and acrolein concentrations as functions of the time of contact, the catalyst, and composition of the initial gas mixture). Table 1 gives the data obtained and the oxidation rate calculated for the transformation of propylene to acrolein. An organic film of acrolein was found to form on the catalyst. The stability of this film was greater in the case of the catalyst containing less copper. The parallel-consecutive reaction scheme suggested in reference 2 was confirmed by the experiments. There are 4 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

PRESENTED: June 19, 1959, by P. A. Rebinder, Academician

SUBMITTED: June 15, 1959
Card 2/2

AUTHORS:

S/195/62/003/005/005/007
E075/E136
Sazonova, I.S., Khokhlova, T.P., Sushentseva, G.M.,
and Keyer, N.P.

TITLE:

Catalytic properties of titanium dioxide and its
solid solutions

PERIODICAL:

Kinetika i kataliz, v.3, no.5, 1962, 751-760

TEXT:

iso-C₃H₇OH on TiO₂ and its solid solutions with WO₃ and Fe₂O₃.
The decomposition was followed by the measurement of electrical
conductivity of the catalysts. The reaction was mainly dehydration
of the alcohol with the formation of 54-99.6% C₃H₆, 5.0-45% H₂,
and small amounts of CO, CO₂ and O₂. It was carried out at
160-435 °C with 9 ml of catalyst and feed rates from 0.1 to 0.6
ml/min. Results: dissolution in TiO₂ of WO₃ (0.5-1.0 mole %)
decreases considerably the activation energy of its electrical
conductivity and increases its catalytic activity. The reaction
temperature and the activation energy decrease markedly, the
reaction rates at 200 °C being greater by 4-6 orders of magnitude

Card 1/2

SO AS USSR)

indicates

LYANDO, V.A.; ALABUZHEV, Yu.A.; SAZONOVA, I.S.; SAZONOV, L.A.

Glass cell with conducting walls for measuring the contact
difference of potentials. Kin.i kat. 3 no.5:794-796 S-0
'62. (MIRA 16:1)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.
(Catalysis) (Electromotive force)

L 1119-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT/GS

ACCESSION NR: AT5020484

UR/0000/64/000/000/0380/0387

AUTHORS: Korovskaya, I. A. ; Sazonova, I. S. / Maydanovskaya, L. G.

TITLE: Effect of the gas and vapor adsorption upon the work function of semi-conductors having a structure of zinc sulfide

SOURCE: Mezhevuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (poverkhnostnyye i kontaktnyye yavleniya). Tomsk, 1962. Poverkhnostnyye i kontaktnyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, Izd-vo Tomskogo univ., 1964, 380-387

TOPIC TAGS: gas adsorption, work function, semiconductor, zinc sulfide, germanium, gallium arsenide, copper compound

ABSTRACT: Results of study of the electron work function of germanium, gallium arsenide, and cuprous bromide in vacuum, oxygen, hydrogen, propylene, and isopropanol vapors are reported. The information is of importance since adsorption of gases and vapors by the crystal would be expected to affect its electronic state and, therefore, its semiconducting properties. The work function was

Card 1/3

L 1119-66

ACCESSION NR: AT5020484

determined by measuring the contact potential differential (CPD) with a vibrating condenser. The setup and measuring method were described by N. P. Keyser, I. S. Sazonova (Polnyy otchet po probleme "Nauchnyye osnovy podbora katalizatorov," razdel IV, 1963). Preparation of the specimens was described in two previous reports by L. G. Maydanovskaya and I. A. Kirovskaya (Trudy TGU, 157, 298, 1963; "Kinetika i kataliz," No. 4-5, 1964). Before being placed in the instrument, the specimens were polished with a fine abrasive on glass, digested with hot H_2O_2 and H_2O_2 with alkali, washed with boiling distilled water, then activated in vacuum at 300C (reference electrode, gold leaf, was activated at 400C) for at least 40-50 min. The measurements in O_2 , H_2 , and C_3H_7 were conducted between 20-250C, in C_3H_7OH — at room temperature and 50C. Most significant were the measurements in O_2 atmosphere. The experimental results for the three isoelectric compounds are presented graphically. The work function of the semiconductors in O_2 increased rapidly with increased temperature above 50-60C, especially in the region of 150-250C, where the greatest chemisorption takes place. This observation, as well as the fact that the work function increase was proportional to the increase in oxygen adsorption, led to the conclusion that a definite correlation exists

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L 1119-66

ACCESSION NR: AT5020484

between the electron work function (electronic state of the surface) and adsorption ability of the given semiconductor. Studies in the atmosphere of H_2 , C_3H_7 , and C_3H_7OH were inconclusive due to the poor experimental conditions. The authors express their gratitude to N. P. Keyyer for attention and interest shown during this work. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Kafedra fizicheskoy i kolloidnoy khimii Tomskogo gosudarstvennogo universiteta im. V. V. Kuybysheva (Department of Physical and Colloidal Chemistry of Tomsk State University); Institut kataliza SO AN SSSR (Catalytic Institute, SO AN SSSR)

SUBMITTED: 06Oct64

ENCL: 00

SUB CODE: EC

NO REF SOV: 008

OTHER: 001

Card 3/3

KEYYER, N.P.; MIKHAYLOVA, I.L.; SAZONOVA, I.S.

Chemical adsorption of gases on titanium dioxide and its solid
solutions having different electric properties. Kin. i kat. 5
no. 6: 1086-1094 N-D '64. (MIRA 18:3)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.

L 59533-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Pe-4 IJP(c) JD

ACCESSION NR: AP5016812

UR/0195/65/006/003/0448/0456

531.41 : 537.533.2 : 546.824-31

AUTHOR: Sazonova, I. S.; Keyer, N. P.

TITLE: Investigation of the electron work function of titanium dioxide and its solid solutions during chemisorption and catalytic reaction

SOURCE: Kinetika i kataliz, v. 6, no. 3, 1965, 448-456

TOPIC TAGS: electron work function, titanium dioxide, solid solution, chemisorption, catalytic reaction

ABSTRACT: The electron work function of titanium dioxide and its solid solution with 0.5 and 1.0 mol % of WO_3 and Fe_2O_3 was measured *in vacuo*. The effect which chemisorption of electron acceptor and donor gases, oxidation of carbon monoxide, and decomposition of isopropyl alcohol over these oxide semiconductors has on the electron work function was studied in the 0-600°C range with varying reaction duration. The work function was measured by the vibrating condenser method. The electron work function was derived under given conditions from the potential difference between an electrode made of the semiconductor being studied and a gold reference

Card 1/3

L 59533-65

ACCESSION NR: AP5016812

electrode. Samples of solid solutions of TiO_2 with 0.6 and 1.0 mol % of WO_3 exhibit higher electrical conductivity than pure TiO_2 . This is due to the fact that WO_3 -containing material has lower energy of activation of electrical conductivity and a characteristic high electron work function under vacuum. In no case was a simple proportionality found between the oxygen chemisorption and the change in work function. For all samples except a solid solution of TiO_2 +1.0 mol % WO_3 , there is continuous increase in work function during heating in oxygen up to 400°C . The TiO_2 +1.0 mol % WO_3 system exhibited a maximum work function at 150°C indicating a desorption of O_2 above that temperature. At 400°C there is a complete desorption of oxygen. In the 150° - 400°C range there is a decrease in catalytic activity for oxidation of CO due to reduced surface coverage with oxygen. With all samples, the increase in work function coincides with the instant of interaction of CO with O_2 on the surface. Formation of a surface complex (CO_3^-) during oxidation reactions over semiconductor catalysts is postulated. In the case of isopropyl alcohol decomposition the work function increases for all catalysts with an increase of temperature. This effect is due to desorption of alcohol and water. Orig. art. has: 1 table, 6 figures.

Card 2/3

L 59533-65

ACCESSION NR: AP5016812

ASSOCIATION: Institut kataliza SO AN SSSR (Institute of Catalysis SO AN SSSR)

SUBMITTED: 27May64

ENCL: 00

SUB CODE: GC

NO REF SOV: 005

OTHER: 002

llc
Card 3/3

MIKHAYLOVA, I.L.; SAZONOVA, I.S.; KEYER, N.P.

Oxidation of carbon monoxide on titanium dioxide and its solid solutions with tungsten and iron oxides. Kin. i kat. 6 no.4:704-709 JI-Ag '65. (MIRA 18:9)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.

SAZONOVA, I.V.

Results of the study of reservoir microflora of oil fields in
Kuybyshev Province. Trudy Inst.mikrobiol. no.9:121-123 '61.
(MIRA 15:5)

1. Nauchno-issledovatel'skiy institut neftyanoy promyshlennosti,
Kuybyshev.

(Kuybyshev Province--Oil fields--Microbiology)

SMIRNOVA, T.V.; NAUMOVA, I.I.; SAZONOVA, I.V.

Synthesis of some halogenated β -fluoroethyl phenyl ethers. Zhur.
VKHO 8 no.1:115-116 '63. (MIRA 16:4)

1. Moskovskiy khimiko-tehnologicheskii institut imeni D.I.
Mendeleeva,
(Ethers) (Halogen compounds)

ASHIROV, R.B.; SAFONOVA, I.V.

Mechanism of biogenic sealing of oil pools confined to carbonate collectors. Mikrobiologiya 31 no.4:680-683 J1-Ag '62. (MIRA 18:3)

1. Gosudarstvennyy institut po proyektirovaniyu i issledovatel'skim rabotam nefteobryvayushchey promyshlennosti vostochnykh rayonov strany, Kuybyshev.

STARETS, I.S.; RUVINSKIY, S.M.; SAZONOVA, K.N.

Modernization of bearing mountings on papermaking machines and
supercalenders. Bum.prom. 31 no.9:15-20 S '56. (MLRA 9:11)

1. Leningradskoye montazhno-tekhnicheskoye byuro tresta Soyuzpod-
shipniksbyt.
(Papermaking machinery) (Bearings (Machinery))

COMMON ELEMENTS		PROCESSES AND PROPERTIES INDEX		1ST AND 2ND ORDERS		1ST AND 2ND ORDERS	
Use of polarographic method in analysis of ash components of coal. I. A. Korshunov, L. M. Gerasimova, and R. V. Protchenko (Gor'ki State Univ., U.S.S.R.). <i>Zavodskaya Lab.</i> 13, 301-3(1947).—The purpose of this work was to develop a method for the polarographic detn. of Cu, Zn, and Cr in coal ash. (1) Detn. of Cu and Zn: Treat 0.5 g. of finely powd. coal with one ml. HNO_3 (1:1), evap. the acid carefully, and heat to ash in a crucible furnace at temp. not over 400-500°. Cool, treat with one ml. H_2SO_4 (1:1), and evap. to formation of H_2SO_4 fumes. Wash the ash onto a filter, neutralize excess acid in filtrate with NH_3, then add 10 ml. NH_3 in excess, dil. with water to 50 ml., stir, and withdraw 5 ml. for the electrolyzer. After adding a crystal of sulfite and soln. of gelatin, make the polarographic detn. with a galvanometer sensitivity of $1/\mu A$ from the max. Ppt. in the soln. does not interfere with the detn. After measuring the wave heights of Cu and Zn and using calibration charts, calc. the Cu and Zn in the coal. Relative deviations for Cu do not exceed $\pm 5.0\%$ and for Zn $\pm 7.0\%$. (2) Detn. of Cr: Reduce a 0.5-g. sample to ash at 400-500° with access of air, cool the ash, treat with 2 ml. H_2SO_4 (1:1), evap. excess acid, and dissolve in water. Then sep. the Cu by adding one g. of Zn dust, heating to boiling, adding more Zn dust, filtering, and washing with $N HCl$ until filtrate reaches vol. of 50 ml. Polarographic detn. is made in a glass closed with a stopper with holes for the capillary of the dropping-fig. electrode, a tube for blowing H through				the soln., a funnel for adding liquid Zn amalgam, and a tube leading to the satd. calomel electrode which is the anode. Pour 5 ml. of the soln. into the glass, blow H through the soln. for 15-20 min., and add 10-15 ml. of liquid Zn amalgam. Shake carefully while blowing H through the soln. for another 5-7 min., then stopper the funnel, and make a polarographic detn. Relative error is as high as 8%. More accurate results can be obtained by maintaining const. acidity of the soln. during the detn. The detn. lasts 1-1.5 hrs. B. Z. Kamich			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION							
1ST AND 2ND ORDERS							

191 AND NO. 000000
 PROCESSES AND PROPERTIES INDEX
 191 AND 4TH CREDITS

Polarographic determination of copper and iron in
 crude and cathode nickel. I. A. Korshunov, L. N.
 Sizanova, and M. K. Shchennikova (Gor'ki State Univ.).
 Zashchita Lab. 13, 590-71 (1947).--Dissolve 0.5 g. of
 crude Ni or 1 g. of cathode Ni in 10-20 ml. of 5 N HNO₃,
 carefully add to the hot soln. 20 ml. of N NH₄Cl, ppt.
 the Fe with 25% NH₄, heat for several min., filter, and
 wash the ppt. To the filtrate and washings add 1 ml. of
 0.2% gelatin soln. to suppress the max. on the Cu wave
 and dil. to 100 ml. when analyzing crude Ni or to 50 ml.
 when analyzing cathode Ni. Use 5 ml. of the soln. in an
 electrolyzer for polarographing. In the case of cathode Ni,
 pass H through the soln. before recording the polarogram.
 Det. the concn. of Cu from an empirical curve. To det.
 Fe, dissolve the Fe(OH)₃ ppt. on the filter with 15 ml. of
 hot, 2 N HCl, wash the filter, dil. the filtrate and washings
 to 25 ml., transfer 5 ml. of the soln. into an electrolyzer,
 pass H through the soln. for 10-15 min., and record the
 Fe wave. B. Z. Kamikh

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION
 191 AND 4TH CREDITS

4

Polarographic analysis of zinc-plating baths. I. A. Korshunov and L. N. Sazanova. *Zavodskaya Lab.* 13, 1172-3(1947).—A 1-ml. sample is treated with 25% NH_4OH until clear, then 15 ml. 2 N NH_4Cl is added and the vol. adjusted to 100 ml. A 1 ml. aliquot is placed in the polarographic cell (contg. equal parts N NH_4OH and N NH_4Cl). The concn. of the Zn is estd. graphically as usual. Titration of the soln. by N $\text{Pb}(\text{NO}_3)_2$ is best done in the presence of EtOH and shows a clean break at the end point for the sulfate ion; a 3-ml. sample is placed in the vessel, 2 ml. EtOH added, and the tip of the buret with N $\text{Pb}(\text{NO}_3)_2$ soln. is dipped below surface; after 0.8 v. potential is applied, titration is conducted and the end point is shown by the break caused by increase of the diffusion current. Cu and Pb can be estd. by usual polarography. Fe is best detd. colorimetrically. G. M. K.

ASH-11 METALLURGICAL LITERATURE CLASSIFICATION

SAZANOVA, L. N.

USSR/Metals

Polarographic Analysis
Electrolytes

May 1948

"Direct Polarographic Determination of Copper and
Lead in a Nickel Electrolyte," I. A. Korshunov and
L. N. Sazanova, Inst Chem, Gorkiy State U, 1 p

"Zavod Lab" Vol XIV, No 5

Copper waves are masked by diffusion wave. This
difficulty can be overcome by treating nickel elec-
trolyte with a small amount of hydrogen peroxide and
soda, which splits up organic compounds and pre-
cipitates iron.

75R86

PROCESS AND PROPERTIES INDEX

1. A. Korshunov and L. N. Saranova (Gorky State Univ. U.S.S.R.). *Zh. Fiz. Khim.* 1968, 42, 218 (1968). - Ash 10-15 g. of peat with good access of air, cool, boil with 5 ml. 7.5 N HNO₃, and neutralize with concd. NH₄OH, to ppt. Fe completely. Cool to room temp., dil. to 50 ml. with N NH₄OH soln., decant 5 ml. of clear soln. into an electrolyzer, pass H₂ through the soln., and det. polarographically. Then add 0.1 ml. of 0.01 N Cu soln., pass in H₂ for 5-10 min., and det. again. Det. the Cu content from polarograms; it is also possible to do this from a calibration curve. If a max. appears on curves, add 0.3-0.5 ml. of 10% gelatin soln. R. Z. Kamich

AS - 5.1 A METALLURGICAL LITERATURE CLASSIFICATION

100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

GAZANOVA, L. N.

Mbr., Sci. Res. Inst. Chemistry, Gorkiy State Univ., -c1948-c49-. Mbr., Chair Inorganic Chemistry, Gorkiy State Univ., -c1949-. "Polarographic Determination of Copper in Peat Ash," Zavod. Lab., 14, No. 2, 1948; "Direct Polarographic Determination of Copper and Lead in a Nickel Electrolyte," *ibid.*, No. 5, 1948; (75T86) "Polarographic Determination of Nitrobenzene," *ibid.*; "Polarographic Determination of Phthalimide, Isatin, Diorginole, and Indigocarmine," *ibid.*, 15, No. 11, 1949; (153T12) "Reduction of Benzaldehyde and -Dimethylaminobenzaldehyde in a Mercury Drop Cathode," Zhur. Fiz. Khim., 23, No. 2, 1949; (47/49T12) "Reduction of o-, m-, and p-Nitrobenzaldehydes on the Mercury Drop Cathode," *ibid.*, No. 11, 1949; "Polarographic Investigation of Sulfamide Compounds," Zhur. Obshch. Khim., 21, No. 3, 1951.

BAZANOVA, L. N.

36598. KORSHUNOV, I. A. i BAZANOVA, L. N. Vosstanovleniye O -, M - i R - Nitro-Benzal'degidov Na Etutnom Kapel'nom Katode. Zhurnal Fiz. Khimii, 1949, Vyp. 11, c. 1297-304.

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

SAZANOVA, L. N.

USSR/Chemistry - Reduction, Electro-Polarography

Nov 49

"Polarographic Determination of Phtalimide, Isatin, Dioxyindole, and Indigocarmin,"
I. A. Korshunov, L. N. Sazanova, M. K. Shchennikova, O. P. Malkova, Inst of Chem,
Gor'kiy State U, 3 1/2 pp

"Zovad Lab" No 11

Shows that all subject compounds can be reduced on the mercury-drop cathode.
Pthalimide can be determined quantitatively only in acid solution, while isatin
and dioxyindole, in alkaline solution as well. Indigocarmin can be determined in
mediums of any pH value. Includes two graphs.

PA 153T12

CA

7

Polarographic determination of phthalimide, isatin, dioxyindole, and indigocarmine. I. A. Korshunov, L. N. Sazanova, M. K. Shchennikova, and O. P. Malkova (State Univ., Gorki). *Zorodskaya Lab.* 13, 1237-90 (1949).—Phthalimide is detd. in acid solns. (buffers at pH about 5 or 0.1-1.0 N HCl) with a half-wave potential at $E_{1/2}$ in 0.2 N HCl of -0.7 v. Isatin can be detd. in acid or alk. solns. with a half-wave potential at pH 2.64 of -0.24 v., while in alk. solns. (0.1-1.0 N NaOH) the half-wave potential is -1.45 v. Dioxyindole undergoes transformations at pH above 4 giving varying wave-forms with time; at pH 2.64 its half-wave potential is -0.23 v. Indigocarmine gives stable waves at pH 1.5-11.0; half-wave potential varies with concn.: at pH 2.64 it is -0.24 v. at 4 millimolar concn. and -0.4 v. at 30 millimolar.

G. M. Kosolapoff

Reduction of benzaldehyde and *p*-dimethylaminobenzaldehyde at a dropping-mercury cathode. I. A. Korshunov and L. N. Sazanova. *Zhur. Fiz. Khim.* (J. Phys. Chem.) 23, 202-8(1949).—Polarography of BzH solns. in H₂O 70, EtOH 30% in the presence of phosphate-citrate buffers showed 2 waves between pH 2.6 and 6.0 and one wave at pH > 6.2. The 2nd wave was relatively greater the greater the concn. *c* of BzH and remained alone at pH > 6.2. The diffusion current was proportional to *c* between 4×10^{-5} and 10^{-2} mol./l. The electrode reaction involves 2 electrons, i.e. that BzH is reduced to PhCH₂OH, contrary to Tokuoka (*C.A.* 30, 1696⁹). The half-wave potentials depended on pH, were more neg. when *c* was greater, and did not vary between 0° and 15°. *p*-Me₂NC₆H₄CHO showed 2 waves between pH 5.0 and 6.7, and one wave outside this range. The diffusion current at pH > 6.7 was about 1/2 that at pH < 5. The half-wave potentials depended on pH, increased with *c*, and decreased by 0.2 v. when the temp. rose from 0° to 15°. The 2 waves observed for both compds. may correspond to the reactions $RCHO + 2H^+ + 2e \rightarrow RCH_2OH$ and $RCHO + 2H_2O + 2e \rightarrow RCH_2OH + 2OH^-$.

J. J. Bikerman

Sci. Res. Inst. Chem., Leningrad State Univ

ASD-55A METALLURGICAL LITERATURE CLASSIFICATION

Reduction of *o*-, *m*-, and *p*-nitrobenzaldehyde at a dropping-mercury cathode. I. A. Korshunov and L. N. Suzatova (Gorkov. Gosudarst. Univ., Gorki). *Zhur. Fiz. Khim.* 23, 1290 (1949) (1949); cf. preceding abstr. *o*-(I) and *m*-Nitrobenzaldehyde (II) are reduced in 3 steps. In 0.0015 *M* soln. in aq. KOH, the potential *V* (referred to satd. HgCl/Hg electrode) at 25° for I is e.g., 0.14, 0.24, 0.34, 0.44, and 0.49 v. for the first wave and 0.90, 1.10, 1.26, 1.41, and 1.63 v. for the 2nd wave at pH 1.31, 2.75, 4.01, 6.96, and 12.00, resp. II has *V* rising from 0.21 to 0.78 (first wave) and from 1.01 to 1.56 (2nd wave) when pH increases from 1.31 to 11.95. *p*-Nitrobenzaldehyde (III) is reduced in 2 steps at pH < 5 and in 3 steps at pH > 6. The *V* at pH 1.62, 6.53, and 11.95 are 0.19 and 1.06; 0.46, 1.29, and 1.62; and 0.53, 1.40, and 1.60 v.,

resp. The *V* of the first wave, especially of II, nearly agrees with the first *V* of PhNO₂, i.e. represents reduction of NO₂. The magnitude of the diffusion current confirms this. The 2nd wave of I and II combines the 2nd reduction step of PhNO₂ with the wave of BaH (cf. C.A. 43, 6316f); it is unknown to which of these reactions the 2nd and the 3rd wave of III belong. The shifts in *V* produced by introducing NO₂ into BaH and CHO into PhNO₂ are attributed to the presence of resonance structures.

J. J. Hiskerman

SAZANOVA, L.N.

Am

Polarographic determination of aromatic ketones and aldehydes. I. A. Korshunov, Z. B. Kuznetsova, L. N. Sazanova, and A. S. Kirillova (Gorki State Univ., *Zavodskaya Lab.* 16, 144-6 (1950)). For AcPh, Ph₂CO, *p*-Me₂NC₆H₄CHO, and BzH only one diffusion wave is seen in acid solns. but raising the pH from 3 to 6 brings up a 2nd wave, which is the only one left when the pH rises above 6. Cinnamaldehyde gives also a 3rd wave which is present at all pH values and changes from -1.49 v. half-wave potential at pH 2.93 to -1.22 v. at pH 9.55. The half-wave potential (against satd. calomel electrode) is as follows: for AcPh -1.07 and -1.6 v.; Ph₂CO -1.1 and 1.45; BzH -1.0 and -1.35; *p*-Me₂NC₆H₄CHO -0.95 and -1.05; PhCH:CHCHO -0.90 and -1.84 v., resp. Polarographic detns. of these substances are readily performed when alc. solns. of the materials are used, since their soly. in H₂O is poor; 0.1-1.0 N HCl may be satisfactorily used as the solvent in such cases.

G. M. Kosolapoff

SAZANOVA, L. N.

Mar 51

USSR/Chemistry - Sulfa Drugs

"Polarographic Investigation of Sulfamide Compounds," I. A. Korshunov, A. S. Kirillova, M. K. Shchennikova, L. N. Sazanova, Sci Res Inst Chem, Gor'kiy State U

"Zhur Obshch Khim" Vol XXI, No 3, pp 565-570

Of the compd albucid, sulfathiazole, sulfamethylthiazole, sulfapyridine, sulfadiazine, 4-(p-aminobenzenesulfonamido)-benzene-1-sulfonamide, sulfanilamide, red prontosil, and soluble prontosil, the 1st 6 were reducibel at Hy drop electrode, the rest not reducible. Calcd diffusion coeff. Performed polarographic quant analysis of compd

176T31

KORSHUNOV, I.A.; SAZANOVA, L.N.

Reduction of dioxindole on a dropping mercury electrode. Zhur.Obshchey
Khim. 23, 145-8 '53. (MIRA 6:3)
(CA 47 no.13:6272 '53)

1. Gor'kovskiy gosudarstvennyy universitet.

THOMPSON, Alexander John (1885-); RAPPORT, M.G. [translator]; SAZONOVA, L.I.
[translator]

[Tables of logarithms to twenty decimal places] Tablitsy
dvadtsatiznachnykh desiatichnykh logarifmov chisel. Ob-
rabotka tablits i perevod s angliiskogo M.G. Rapporta i L.I.
Sazonovoi. Moskva, Vychislitel'nyi tsentr AN SSSR, 1961. 2 v.
Translated from the English. (MIRA 16:4)
(Logarithms) (Mathematics--Tables, etc.)

SAZONOVA, L.P.

USSR.

Reaction of thiuram and sulfur. G. A. Blokh and L. P. Sazonova. *Lezhaya. Prom.* 17, No. 10, 40-1 (1952).
 1952, 176. 7, 25-7. — Heating $\text{Me}_2\text{NC(S)SSC(S)NMe}_2$ (I) with radioactive S in the temp. interval of 60°–140° for 5–60 or more min. either as a mixt. alone or in rubber which is vulcanized results in intensive exchange of S atoms between I and S; the reaction occurs even at 100°, and becomes evident after 25 min.; at lower temps. the reaction is undetectable. The detection was made as follows: After completion of a run, the components were sepd. by isolation of $\text{Me}_2\text{NCSS}_2\text{H}$ in the form of Ni salt, whose radioactivity was then measured. In the case of rubber formulations (butadiene-Na type), the products were extd. with H_2O and then with EtOH . The exchange probably occurs through intermediate formation of tri- or tetrasulfides, which then dissociate to free S and the monosulfide. G. M. Kosolapoff

SAKOWA, L. V.

"Investigation of the Biological Development of Mustards and Other Oil-Bearing Cruciferac in Connection with Acclimatization of Mustard in the North." Thesis for degree of Cand. Biological Sci. Sub 4 Apr 49, Moscow State Pedagogical Inst imeni V. I. Lenin

Summary 82, 18 Dec 52, Dissertations Presented for degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec. 1949.

SAZONOVA, L.V., aspirant

Spirochete antigens in the complement fixation test in serodiagnosis of syphilis [with summary in English]. Vest.derm. i ven. 31 no.4: 16-21 J1-Ag '57. (MIRA 10:11)

1. Iz otdela mikrobiologii (zav. - prof. N.M.Ovchinnikov)
TSentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. - kandidat meditsinskikh nauk N.M.Turanov)
Ministerstva zdravookhraneniya RSFSR.

(WASSERMAN REACTION

alcoholized suspension validity, comparison with
protein fractions extracted from Treponema pallidum)

SAZHONOVA, L.V., Cand Med Sci—(diss) "Antigens from ~~the~~ cultures of
Treponema pallidum in the comple^(me) fixation ^{reaction} ~~test~~ in the serodiagnosis of
syphilis. Rostov on Don, 1953. 19 pp (Rostov on Don State Med Inst),
200 copies (KL, 47-53, 136)

-77-

SAZONOVA, L.V.

Study of complement-fixing antibodies in syphilis. Vest.derm.i ven.
33 no.4:49-54 J1-Ag '59. (MIRA 12:11)

1. Iz mikrobiologicheskogo otdela (zav. - prof. M.M. Ovchinnikov)
TSentral'nogo nauchno-issledovatel'skogo kozhno-venereologicheskogo
instituta (dir. - kand.med.nauk N.M. Turanov) Ministerstva zdravookh-
raneniya RSFSR.

(SYPHILIS, diagnosis)

SAZONOVA, L.V.

Complement fixation reaction in 1/5 of the volume with the protein fraction of Treponema pallidum as an antigen. Lab. delo 8 no.2:35-38 F '62. (MIRA 15:2)

1. Otdel mikrobiologii (zav. - prof. N.M.Ovchinnikov) Tsentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta Ministerstva zdravookhraneniya RSFSR, Moskva.
(COMPLEMENT FIXATION) (TREPONEMA PALLIDUM)
(ANTIGENS AND ANTIBODIES)

OVCHINNIKOV, N. M., prof.; SAZONOVA, L. V.

Comparative evaluation of the results of the *Treponema pallidum*
immobilization test and standard serological reactions. Vest.
derm. i ven. no.4:48-54 '62. (MIRA 15:4)

1. Iz mikrobiologicheskogo otdela (zav. - prof. N. M. Ovchinnikov)
TSentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo
instituta (dir. - kandidat meditsinskikh nauk N. M. Turanov)
Ministerstva zdavookhraneniya RSFSR.

(TREPONEMA PALLIDUM) (SYPHILIS--DIAGNOSIS)

SAZONOVA, L.V.

Results of the Treponema pallidum immobilization reaction TPI
performed by Ovchinnikov's simplified method. Vest. derm. i
ven. 37 no.7:58-62 J1'63 (MIRA 16:12)

1. Tsenral'nyy kozhno-venerologicheskiy institut (dir.-dotsent
N.M.Turanov) Ministerstva zdравookhraneniya RSFSR.

OVCHINNIKOV, N.M.; LUR'YE, S.S.; SAZONOVA, L.V.; BEDNOVA, V.N.

Fluorescent serological method in the diagnosis of syphilis. Lab.
delo 10 no.5:302-306 '64. (MIRA 17:5)

1. Mikrobiologicheskiy otdel (zaveduyushchiy - prof.N.M.Ovchinnikov) TSentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (direktor - kand.med.nauk N.M.Turanov) Ministerstva zdravookhraneniya RSFSR, Moskva.

SASOMOVA, M. V.

SASOMOVA, M. V.: "Obtaining lithium-containing, lead-free, boron-free, science glasses, and a study of their properties."
Min Higher Education USSR. Leningrad Order of Labor
Red Banner Technological Institute Leningrad Soviet.
Chair of the Technology of Ceramic Products.
Leningrad, 1956.
(Dissertation For the Degree of Candidate in Technical
Sciences)

See: Knizhnaya Letopis', No. 18, 1956

30-58-4-14/44

AUTHORS: Bondar', I. A., Sazonova, M. V.

TITLE: At the Institutes of the German Academy of Sciences in Berlin (DDR) (V institutakh Germanskoy Akademii nauk v Berline, GDR)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, . Nr 4, pp. 78-79 (USSR)

ABSTRACT: In October 1957 the authors visited a number of institutes in Berlin (DDR). At the Institute for Inorganic Chemistry, Director Ye. Tilo, investigations in the field of physico-chemistry as well as of silicate technology were carried out (various types of condensed phosphates, syntheses of silicates and others). The tensiometric method, viscosimetry, X-ray- and microscopic analyses, as well as the method of chromatography are applied. At the Institute for Applied Silicate Research, Director is G. Frank, new kinds of refractories for ash furnaces are developed on the basis of alumina with different additions. At the Institute for Crystal Chemistry, Director Boll-Dornberger, silicate structures are investigated. At the Institute for Applied Silicate Technology of the Mining College (Freyberg) up to 70 graduates leave the school every year. The academic institutes work in

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30-58 -4-14/44

At the Institutes of the German Academy of Sciences in Berlin (DDR)

relation with world known firms, the Ceramic Factory at Khermsdorf and the Shott Glass Factory, where they own experimental plants and scientific research laboratories. The authors underline that in the mentioned institutes mainly young specialists are working. There are 3 - 4 assistants and technical specialists for each scientist. Also the high quality of the apparatus produced in the mechanical workshops of the institutes is pointed out.

1. Chemistry--East Germany

Card 2/2

15-2250

15-2260

27064
S/080/61/034/003/004/017
A057/A129

AUTHORS: Sazonova, M. V., Sitnikova, A. Ya., Appen, A. A.

TITLE: Protection of carbon and graphite from oxidation at temperatures of up to 1,200°C

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 3, 1961, 505-512

TEXT: The preparation and application of high-quality glass-carbide-silicide coatings effective as protection of various carbon-graphite products from oxidation at 1,200°C during more than 100 hours is described. The considerable effect of the composition of the binder on the properties of the coating is demonstrated. Thus properties may be regulated by changing the composition of the binder. It was observed that the suitability of the binder cannot be estimated by considering data on wetting properties obtained by the drop-spilling method. More accurate information can be obtained by applying a mix of powdered glass on the surface of the sample and determining the wetting properties. The present investigations were necessary since literature data concerning protection of carbon-graphite products against corrosion at high temperature are patents, e.g., US patent 2449254, June 5, 1956, or West German patent 1009093, December 21,

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Protection of carbon and graphite ...

1957, and do not contain any detailed information on the efficiency or composition of the described protective coatings, like data given by R. G. Higginbotham and M. Y. Kemp [Ref. 5: Ceram. Age. 71, 2, 28-31, 42 (1958)]. In the present experiments glass-silicide, glass-carbide and glass-carbide-silicide coatings were investigated, which were applied on various carbon and graphite samples (20 x 10 x 5 mm) with a porosity of 11 to 35%. The coating was prepared with molybdenum disilicide, silicon carbide (particle size 50-63) and vitreous binders of a different composition (Table 1). To improve the wetting of the surface with the mix, the samples were preliminarily prepared by vacuum-treatment at 1,100° - 1,200° C or by rubbing with water. Since both treatments showed good results, the latter was used in the present experiments. The samples were first dried at 110 - 150° C and then sintered in an argon atmosphere at 1,200 - 1,600° C for 3-4 minutes. Three layers of the mix were applied and thus 0.1 - 0.2 mm protective coatings were manufactured. Heat-resistance of the latter was tested (by heating to 700 - 1,200° C for a certain time), as well as the coefficient of linear thermal expansion (measured at 20° - 1,000° C on a dilatometer), micro-structure (on a MIM-6 (MIM-6) microscope), thermal stability (by thermal shock tests 20 - 1,200 - 20° C) etc. Compositions of the coatings and optimum sintering temperature are presented in Table 2. Glass-silicide coatings were applied on

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Protection of carbon and graphite ...

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graphite samples of the type 3Г-2У (EG-2U) and a considerable effect of the composition of the mix on properties of the coating was observed. Thus a decreasing content of glass increased the thermal resistance and heat-resistance, but deteriorated adhesion of the coating on the sample. Thus coatings no. 1-3 showed low thermal and heat-resistance while coating no. 4 (containing only 10% less binder than no. 1) had 4-fold improved values of heat and thermal resistance, maintaining even the macrostructure of the covered sample after 100 hours holding time at 700°C. On the other hand coatings no. 18-23 did not adhere on the carbon-graphite samples, while coating no. 17 (having only 10% more binder than no. 18-20) showed good adhesion on the sample. In coatings no. 8, 12, 16 (containing 40-60% binder) formation of gas bubbles was observed after heat-resistance tests, while in no. 6, 20, and 14 no bubbles were detected. Best results were obtained with coating no. 6. In the microstructure of the latter a decrease of the MoSi_2 particle size from 50 - 63 to 4-6 μ was observed after heat-resistance tests. Also the amount of the vitreous phase increased with the duration of the test. With coatings no. 4, and 6 good results were obtained on 18 different carbon and graphite types. No coatings with good properties were obtained with barium glass. MoSi_2 apparently reacts with the latter during sintering. For practical use coatings no. 6, 10, 14 were suggested by the authors, especially

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X

Protection of carbon and graphite ...

no. 10 and 14 for higher temperatures. Determinations of the linear thermal expansion demonstrated that coatings with binders no. 238 and 366 have similar values ($\alpha = 597 - 6.62 \cdot 10^{-6}$) in spite of the different values of the binders (238 - $\alpha = 6.67 \cdot 10^{-6}$, and 366 - $\alpha = 3.88 \cdot 10^{-6}$). The high value of α for the binder no. 238 indicates a considerable content of non-vitrified quartz. Glass-carbide coatings no. 24-31 did not show any protective properties against oxidation for carbon and graphite at higher temperatures. Glass-carbide-silicide coatings no. 32-35 had properties better than the last-mentioned, but worse than glass-silicide coatings. Considering the considerable influence of the vitreous binders on the property of the coating, the wetting property of the binder was estimated by the drop-spilling method. Ball-shaped pieces (0.01 cm^3) of the investigated binder were placed on samples of EH-2V graphite, MoSi_2 and SiC_2 and heated in air or argon atmosphere to $1,500^\circ\text{C}$. The obtained results (Fig. 4) demonstrate no wetting ability of the binder no. 238, while barium glass showed good wetting on MoSi_2 and SiC_2 . Since high-quality coatings were obtained with 238 binder while barium glass binders showed low properties, this test is insufficient. More accurate results were obtained by melting the powdered binder on the surface of the sample and estimating the formation of a thin glass film. These tests showed best results with binder 238 and 2010 being in agreement with the

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Protection of carbon and graphite ...

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S/080/61/034/003/004/017
A057/A129

protective property of coatings based on these binders. There are 4 figures, 3 tables and 8 non-Soviet-bloc references. The reference to the English-language publication reads as follows: R. G. Higginbotham and M. Y. Kemp, Ceram. Age, 71, 2, 28-31, 42 (1958)!

ASSOCIATION: Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry AS USSR)

SUBMITTED: July 8, 1960

Table 1: Composition of the vitreous binders

Table 2: Composition of the investigated coatings and sintering temperatures

Table 1: T. 1.

Binder Связка	Content of oxides / Содержание окислов (вес. %) (%) by weight										
	SiO ₂	Al ₂ O ₃	B ₂ O ₃	TiO ₂	ZrO ₂	La ₂ O ₃	CoO	BeO	BaO	ZnO	CaO
238	80	2.5	17.5	—	—	—	—	—	—	—	—
366	59	3	20	6	3	2	5	6	—	—	—
2010	48.5	31.5	—	—	—	—	20	—	—	—	—
Barium glass	37.5	1.0	6.5	—	2.5	—	—	—	44	5	3.4

Barium glass containing 1 part by weight Co₂O₃

Card 5/7

SAZONOVA, N.

Results of friendship with a progressive group. Prom.koop. 14
no.8:34 Ag '60. (MIRA 13:8)

1. Predsedatel' pravleniya arteli invalidov "Krasnyy tekstil'-
shchik," g.Shchelkovo, Moskovskoy oblasti.
(Shchelkovo--Textile industry)

ZHDANOV, V.; KHRISTOV, L.; MURAV'YEV, M.; RYZHOV, A.; VASHKOV, V.; FEDOSOVA, A.
POGODINA, L.; KLECHETOVA, A.; SUBBOTIN, A.; ZAKHAROVA, Ye.; GANDEL'S-
MAN, B.; SAZONOVA, N.; ZEVAKINA, I.; KUDRINSKIY, I.; MISKAROV, D.;
KHANENYA, F.

Professor A.N.Tregubov; obituary. Gig. i san. 21 no.10:63 0 '56.

(MLRA 9:11)

(TREGUBOV, ALEKSANDR NIKOLAEVICH, 1888-1956)

OVCHINNIKOV, N.M.; TURANOV, N.M.; SAZONOVA, L.V.

Role of the Treponema pallidum immobilization reaction in the diagnosis of false-positive results with standard serological reactions in pregnant women and patients of psychiatric hospitals. Vest. derm. i ven. 37 no.4:52-57 Ap '63. (MIRA 17:5)

1. Mikrobiologicheskii otdel (zav. - prof. N.M. Ovchinnikov)
TSentral'nogo kozhno-venerologicheskogo instituta (dir. -
kand. med. nauk N.M. Turanov) Ministerstva zdravookhraneniya
RSFSR.

BERSON, Garri Zalmanovich, kand. sel'khoz. nauk. Prinsipal
uchastiye MESHCHERYAKOV, V.I.; SAZONOVA, L.V., spets.
red.

[Hydroponics in the Far North] Gidroponika na Krainem
Severe. Murmansk, Murmanskoe knizhnoe izd-vo, 1964. 126 p.
(MIRA 18:5)

1. Zamestitel' direktora Murmanskoy olenevodcheskoy opytney
stantsii (for Meshcheryakov).

OVCINIKOV, N.M.; LURIE, S.S.; SAZONOVA, L.V.; BEDNOVA, V.N.

Fluorescent method in the diagnosis of syphilis. Cesk. dermat.
39 no.5:297-303 S '64.

1. Mikrobiologicke oddeleni (vedouci prof. N.M. Ovcinikov)
Ustredniho vedeckovyzkumneho ustavu pro dermato-venerologii
ministerstva zdravotnictvi SSSR (reditel kand. ved. N.M.
Turanov).

OVCHINNIKOV, N.M., prof.; VASIL'YEV, T.V.; YEGOROV, G.I.; TURANOV, N.M., kand.
med.nauk; SAZONOVA, L.V.

Clinical evaluation of the Treponema immobilization reaction in
syphilis. Vest. dermat. i ven. no.2:63-71 '65.

(MIRA 18:10)

1. Mikrobiologicheskiy otdel (zav. - prof. N.M.Ovchinnikov) i
sifilidologicheskiy otdel (zav. - prof. M.A.Rozentul) Tsentral'nogo
nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta
(direktor - kand.med.nauk N.M.Turanov; zamestitel' direktora po
nauchnoy chasti - prof. A.A.Studnitsin) Ministerstva zdravookh-
raneniya SSSR, Moskva.

SAZONOVA, L.V.

Immune immobilization reaction in serodiagnosis of syphilis. Vest.
derm. i ven. no.2:71-76 '65. (MIRA 18:10)

1. Mikrobiologicheskii otel (zav. - prof. N.M.Ovchinnikov) TSentral'-
nogo kozhno-venerologicheskogo instituta (direktor - dotsent N.M.
Turanov) Ministerstva zdravookhraneniya SSSR, Moskva.

L 11028-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG
 ACC NR: AP5028728 SOURCE CODE: UR/0363/65/001/011/1965/1977
 AUTHOR: Sazonova, L. V.; Davtyan, I. A.; Glushkova, V. B. 55 58
 ORG: Institute of Silicate Chemistry im. I. V. Grebenshchikov, Academy of Sciences
 SSSR (Institut Khimii silikatov Akademii nauk SSSR) 55 B
 TITLE: Study of the Nd_2O_3 - ZrO_2 system and effect of the method of preparation on
 the properties of the product obtained
 SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965,
 1965-1977
 TOPIC TAGS: neodymium compound, zirconium compound, powder metal sintering, powder
 metal mixing, phase equilibrium, chemical composition, metal analysis, crystal
 structure
 ABSTRACT: Thermal, x-ray phase, molecular-spectroscopic and chemical methods of
 analysis were used to study the products obtained from sintering pressed powder mix-
 tures of ZrO_2 and Nd_2O_3 (in the ratios 90%:10%, 66.7%:33.3%, and 10%:90%). The mix-
 tures were prepared by combining solutions of the salts and evaporating, coprecipi-
 tating in the amorphous state, mechanical mixing of the hydroxides and mechanical
 mixing of the oxides. Thermograms of the mixtures, curves of thermal decomposition,
 infrared spectra, and x-ray diffraction patterns of the products are given. The me-
 chanism of formation of equilibrium phases is interpreted. It is shown that the com-
 position and crystal structure of the products formed are appreciably affected by the
 method of preparation of the initial mixture. Orig. art. has: 7 figures, 3 tables.
 SUB CODE: 07,11/ SUBM DATE: 24Apr65/ ORIG REF: 005/ OTH REF: 006
 UDC: 546.657 + 546.831
 Card 1/1

MAIAKHOVA, L.V.; SAZONOVA, M.D.

Composition of biotite from rocks in the Tagil-Kuvshinskiy
syenite massif. Trudy Inst. geol. UFAI SSSR no. 70:11-19 '65.
(MIRA 18:12)

BALASHOVA, M.M.; SAZONOVA, M.D.

New data on the stratigraphy and lithology of the terrigenous
sediments in the Lower Carboniferous of the Southern part of
the Kama arch. Neftegaz. geol. i geofiz. no. 5:33-37 '63.
(MIRA 17:5)

IVANOVA, V.D.; TOPALOV, L.I.; SHAYEVICH, A.B.; DANILEVSKAYA, V.V.;
SAZONOVA, M.N.

Spectral analysis of open-hearth slags by the method of conditional integral graphics. Zav. lab. 30 no.11:1346-1348 '64
(MIRA 18:1)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Zaporozhskiy zavod ferrosplavov.

GOLIUS, G.I.; OBUT-PRAVE, N.K.; SAZONOVA, M.R.

Carrier state of pathogenic staphylococci in persons subjected to active immunization with staphylococcal anatoxin. Akush. i gin. 40 no.1:43-45 Ja-F '64. (MIRA 17:8)

1. Bakteriologicheskaya laboratoriya (zav. - kand. med. nauk A.P. Yegorova) i 2-ye akusherskiye otdeleniye (zav. - prof. S.G. Khaskin) Instituta akusherstva i ginekologii (dir. - prof. M.A. Petrov-Maslakov) AMN SSSR, Leningrad.

L 6992-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EPA(w)-2/EPA(bb)-2/EWP(q)/EWP(b)
 Pab-24/Pq-4/Pr-4/Ps-4/Pt-10/Pu-4 ASD(m)-3/AS(mp)-2 JD/WW/WB/WH
 ACCESSION NR: AP4032498 S/0080/64/037/004/0773/0777

AUTHOR: Sazonova, M. V.; Ban'kovskaya, I. B.

TITLE: Protection of titanium carbide from oxidation in an air atmosphere at 1200 C ^{27 27}

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 4, 1964, 773-777

TOPIC TAGS: titanium carbide, oxidation, protection, coating, alumina coating, gamma Al sub 2 O sub 3, gas flame spray coating, borosilicate glass, glass coating, coating porosity, coating impermeability

ABSTRACT: The preparation of a coating for titanium carbide to protect it from atmospheric oxidation on prolonged exposure at 1200 C was investigated. The material selected for this investigation is alumina because of its low heat conductivity. The heat stability of titanium carbide with and without the protective coating is shown in Fig. 1 of the enclosure. It was found that an alumina coating prepared by cold pressing and subsequent firing at 2500C still permitted rapid oxidation of the titanium carbide during the first 10 hours at 1200 C due to the porosity of the coating (see Fig. 1 curve 2 of the enclosure). The porosity of

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I. 6992-65

ACCESSION NR: AP4032498

the coating was substantially reduced by treating it with a glass composition. An impermeable coating was obtained by treating the alumina coating that was applied onto a hot titanium carbide surface (600-800 C) by flame spray coating technique, in a borosilicate glass (40 wt% B_2O_3 and 60 wt% SiO_2) at 1400 C for 5 - 10 minutes interval (see Fig. 1 curve 3 of the enclosure). The best result was obtained using a 0.15 mm of #238 glass (80 wt% SiO_2 , 2.5 wt% Al_2O_3 , 17.5 wt% B_2O_3) applied over a 0.2 mm Al_2O_3 layer at 1400 C. This coating when in subsequent heat treatment at 1200 - 1250 C produced a transparent crystallized glassy coating (see Fig. 1 curve 4 of the enclosure). Borosilicate glasses containing over 10% Al_2O_3 were porous and not suitable. The properties of the alumina coatings can be regulated by changing the composition of the glass and its heat treatment. It was found that the oxidation resistance is greater with finer crystals and smaller glass phase. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Institut khimii silikatov imeni I. V. Grebenshchikova AN SSSR
(Institute of Chemistry of Silicates, AN SSSR)

SUBMITTED: 28Aug62

ENCL: 01

SUB CODE: IC, MM

NO REF SOV: 003

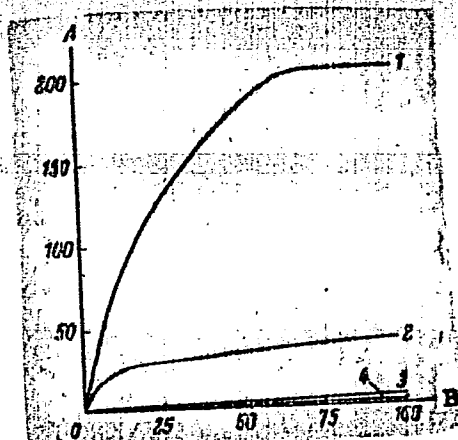
OTHER: 011

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L 6992-65
ACCESSION NR: AP4032498

ENCLOSURE: 02

Fig. 1. Oxidation resistance of titanium carbide samples at 1200 C. A-- increase in weight (mg/cm^2), B--time (hours).
1. without coating. With coating:
2--aluminum oxide, 3--the same + sample No. 7 (60 wt.% SiO_2 , 40 B_2O_3),
4--the same + glass No. 238.



Card 3/3

ACCESSION NR: AP4041792

S/0080/64/037/007/1447/1452

AUTHOR: Sazonova, M. V.; Appen, A. A.

TITLE: Two-layer coatings for protection of graphite from oxidation in air at 1400C

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 7, 1964, 1447-1452

TOPIC TAGS: graphite, graphite oxidation, graphite oxidation prevention, aluminum oxide coating, silicide glass coating, molybdenum disilicide coating, coated graphite oxidation resistance, graphite oxidation resistance

ABSTRACT: Since silicide-glass coatings do not protect graphite from oxidation at temperatures above 1200C, an attempt has been made to improve the protective ability of these coatings by first applying an underlayer of aluminum oxide (93.20% Al_2O_3 , 6.43% SiO_2 , and 0.37% Fe_2O_3). A silicide glass layer is then deposited on this underlayer. Six silicide glasses, containing 40, 50, 60, 70, 80, or 90% $MoSi_2$ and a binder (SiO_2 , 80%; Al_2O_3 , 2.5%; and B_2O_3 , 17.5%), were tested. The best results were obtained with an aluminum oxide underlayer

Card 1/2

ACCESSION NR: AP4041792

0.05—0.1 mm thick, coated with a 0.15—0.20 mm thick upperlayer containing 40% MoSi_2 . The thermal expansion coefficient of this composition was found to be in between those of aluminum oxide and graphite. X-ray diffraction patterns showed that the initial $\alpha\text{-Al}_2\text{O}_3$ is transformed in gas flame into $\gamma\text{-Al}_2\text{O}_3$ containing a small quantity of $\alpha\text{-Al}_2\text{O}_3$; with increasing temperature it is again transformed into $\alpha\text{-Al}_2\text{O}_3$. This combined coating effectively protects graphite from oxidation in air at temperatures up to 1400C for as long as 100 hr and permits graphite to withstand over 100 thermal cycles 20—1300—20C and to resist for a short time a hydrogen-oxygen flame with a temperature of approximately 2000C. The adhesion of both coating layers was found to be entirely satisfactory. Orig. art. has: 5 figures.

ASSOCIATION: Institut khimii silikatov im I. V. Grebenshchikova
AN SSSR (Institute of the Chemistry of Silicates, AN SSSR)

SUBMITTED: 28Aug62

ATD PRESS: 3086

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 008

Card 2/2

L 28461-66 EWP(e)/EWT(m)/T/ETI/EWP(t) IJP(c) JD/MW/JG/OD/MH

ACC NR: AT5027947

SOURCE CODE: UR/0000/65/000/000/0108/0124

AUTHOR: Sazonova, M. V.; Ban'kovskaya, I. B.

79
871

ORG: none

TITLE: Glass-cermet coatings for titanium carbide with oxidation-resistance at high temperature

SOURCE: Seminar po zharostoykim pokrytiyam . Leningrad, 1964. Zharostoykiye pokrytiya (Heat-resistant coatings); trudy seminar. Leningrad, Izd-vo Nauka, 1965, 108-124

TOPIC TAGS: specialized coating, cermet, glass product, titanium compound, high temperature oxidation, corrosion resistance, oxidation, crystal structure

ABSTRACT: Results are given of research on the development of a coating capable of protecting titanium carbide for 100 hours from oxidation at 1200C. The coatings were a combination of filler and binder. Carbides, borides, silicides, and nitrides were used in the experiments as fillers and various glasses as binders. The MoSi₂-base glass-silicide coatings and Cr and Cr₃C₂-base coatings were capable of

Card 1/2

L 28461-66

ACC NR: AT5027947

protecting TiC for 100 hours from oxidation in air at 1200°C. The changes in weight, used as an indicator of sample oxidation, were $\leq 0.1 \text{ mg/cm}^2/\text{hr}$. The glass-silicide coatings did not change their appearance during the tests, but cracked occasionally. The coatings on a Cr and Cr_3C_2 substrate lost their luster during the tests and became porous. The properties of coating 76, made by hot pressing of powders containing MoSi_2 5, Cr 40, Cr_3C_2 15, and binder 40% (consisting of 80% SiO_2 , 17.5% B_2O_3 , 2.5% Al_2O_3), were studied to determine the processes occurring during prolonged heating. The microstructure (heterogeneous distribution in glass of two solid phases, light gray and white color, and pores), heat resistance, microhardness (glass and light gray particles were 1190 and 1150 kg/mm^2 , respectively, whereas the white particles had different microhardnesses, i.e., 1100 on the periphery and 1850 kg/mm^2 in the center of the particles), phase composition (Cr, MoSi_2 and Cr_2O_3 , according to X-ray-ionization curves), electric conductivity ($105.5 \text{ ohm}^{-1} \text{ cm}^{-1}$), heat conductivity ($0.006 \text{ cal/cm sec degree}$), shearing modulus (396.10^3 kg/cm^2), and density (3.65) of coating 76 were determined. The heat resistivity of TiCr coated with the 76 coating was 10 times higher than that of noncoated TiCr. The effective protection was attributed to the formation on TiCr of a surface layer containing a solid solution of Cr in TiC by replacement of Ti atoms. Orig. art. has: 8 fig. and 5 tables.

SUB CODE: 11/ SUBM DATE: 20Jun65/ ORIG REF: 011/ OTH REF: 002
Card 2/2 LC

ACC NR: AP7003139

(A)

SOURCE CODE: UR/0080/66/039/012/2662/2669

AUTHOR: Sazonova, M. V.; Komarova, G. N.

ORG: Institute of Silicate Chemistry im. I. V. Grebenshchikov (Institut khimii silikatov)

TITLE: Boron carbide protection from oxidation and from reaction with various materials at a contact interface in air at 1200C

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 12, 1966, 2662-2669

TOPIC TAGS: ceramic coating, protective coating, high temperature coating, boron carbide, refractory compound, high temperature oxidation, thermal stability

ABSTRACT: Silicate, glass-carbide, glass-silicide, and complex protective coatings on boron carbide have been tested comparatively with unprotected boron carbide in a search for a durable coating which would protect boron carbide at 1200C from air oxidation and reaction with various ceramic materials and EI-435 [U.S. Nimonic 75] and EI-437 [U.S. Nimonic 80] alloys. Three layers of the coating studied were deposited on boron carbide specimens by the standard method of glaze technology. As a result of testing, the most thermally stable was found to be the B12 complex coating which contained in wt. %: 75 MoSi₂, 10 CrB₂, 5 Si, and 10 vitreous binder. The latter was composed of 80 SiO₂, 2.5 Al₂O₃, and

UDC: 546.27'261:620.197

Card 2/2

Card 1/2

SAZONOVA, N. A.

Dept. Disinfestation, Central Sci. Research Inst. for Disinfection, People's
Commissariat for Public Health, MZZERAVA, (1944)

"The Fir-oil as an insecticide."

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 3, 1944.

SAZONOVA, M. A.

Central Sci. Research Inst. for Disinfection, People's Commissariat Public Health,
MEZDRAVA, (1944)

"On the insecticide action of Lethane preparation (384)

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 3, 1944.

114

Pharmacological study of 4-p-azophenylsulfanilamido-
p-butylphenol. N. A. Sazonova. *Farmakol. i Toksikol.*
8, No. 2, 49-50(1945). Toxicity of 4-p-azophenylsul-
famidamido-p-butylphenol (I) to coecus organisms and to
mice and rabbits was detd. in comparison with sul-
famidamido-p-butylphenol (II), and sulfidine (IV). In the
alimentary tract I is less toxic than II or III but more so
than IV. Given intravenously, I has no effect on blood
pressure in doses at which III causes a sharp drop. Clini-
cal tests with I are recommended, at concns. customary for
II.

Julian F. Smith

11H

Ch

Toxicity of pine oil. N. A. Sazonova. *Farmakol. i Toksikol.* 8, No. 2, 60 (1945). Toxicity of pine oil to mice (orally) and rats (skin-patch tests) is very slight. Respiratory tests (8-hr. exposure, mist or vapor concn. 1 mg./liter) showed no toxic effects. Patch tests on human skin showed no irritation, but lab. workers exposed long to the vapor experienced drowsiness and headache. Pine oil is acceptable as a pediculicide. Julian F. Smith

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										1ST AND 2ND ORDERS																									
114																																																			
Comparative toxicity of benzylamine and N-methyl-phenylamine. N. A. Sazonova, <i>Farmakol. i Toksikol.</i> 8, No. 2, 50(1945). Tested on mice and rabbits, PhNH-CH₂-Ph (I) is more toxic than PhNMe (II) in peroral, subcutaneous, or respiratory dosage. Applied directly to rabbit skin both are slightly toxic, II a little more than I. The tests were made to ascertain possible hazards in using I or II as insecticides. Julian P. Smith																																																			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																																																			

²
SAZONOVA, N. A.

WASHKOV, V. I., SAZONOVA, N. A. "The action of DDT preparation on the blood pressure",
Trudy Tsentr. nauch. -issled. dezinfekts. in-ta, Issue 5, 1949, p. 181-86.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statey, No. 24, 1949).

SARONOVA, N. A.

SARONOVA, N. A. "The action of DDT preparation on the morphological status of the blood of rabbits", Trudy Tsent. nauch.-issled. dezinfekts. in-ta, Issue 5, 1949, p. 167-92.

SO: U-4631, 16 Sept 53, (Letopis 'Zhurnal 'nykt Statey, No. 24, 1949).

POLYANSKIY, N.A., kand.sel'skokhoz.nauk; SAZONOV, V.V., red.; SAYTANIDI,
L.D., tekhn.red.

[Valuable local fertilisers] TSennye mestnye udobrenia. Moskva,
Izd-vo M-va sel'khoz.RSFSR, 1960. 133 p.

(MIRA 14:4)

1. Glavnyy agronom Moskovskogo tresta spetsializirovannykh
sovkhozov (for Polyanskiy).
(Fertilisers and manures)

PYATNITSKIY, P.P., starshiy nauchnyy sotr.; SAZONOV, V.V., red.; LEVINA, L.G., tekhn. red.

[Answers to questions on the agricultural artel statute and collective farmers' wages] Otvety na voprosy po ustavu sel'skokhoziaistvennoi arteli i oplate truda kolkhoznikov. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 182 p. (MIRA 14:11)

1. Institut Gosudarstva i prava AN SSSR (for Pyatnitskiy).
(Collective farms--Law and legislation)
(Collective farms--Income distribution)

PROKHOROV, Yu.V.; SAZONOV, V.V. (Moscow)

Some results associated with Bochner's theorem. *Tecr. veroiat. i*
ee prim. 6 no.1:87-93 '61. (MIRA 14:6)
(Probabilities)

SAZONOV, V.V., red.; SAYTANIDI, L.D., tekhn. red.

[Leading agricultural workers talk about their experience; materials of the Conference of Leading Agricultural Workers of Northern Caucasus, Rostov-on-Don, 1961] Peredoviki sel'skogo khoziaistva o svoem opyte; materialy Soveshchaniia peredovikov sel'skogo khoziaistva Severnogo Kavkaza v g. Rostove-na-Donu, 1961. Moskva, Izd-vo M-va sel'.khoz. RSFSR, 1961. 124 p. (MIRA 14:7)

1. Soveshchaniye peredovikov sel'skogo khozyaystva Severnogo Kavkaza.

(Caucasus, Northern--Agriculture)

RAZUMOV, A.I.; KUKHTIN, V., student; SAZONOVA, N.

Reactions of certain phosphorus halogen compounds with
esters of glycolic acid. Trudy KKHTI no.15:7-14 '50.
[pub. '51] (MIRA 12:12)
(Phosphorus compounds) (Glycolic acid)

DAZHONOVA, N. A.

"Toxicity of pp'-dichlorodiphenyltrichlorethane (DDT) for Warm-Blooded Animals." Sub 25, Dec 51, All-Union Sci Res Chemicopharmaceutical Inst imeni Sergo Ordzhonikidze.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

Carl. Chemical Sci.

RAZUMOV, A: KUKTIN, V: SAZONOVA, N.

Phosphorus Halides

Reactions of some halogen compounds of phosphorus with glycolic acid esters. Zhur. ob
khim. 22 No. 2, 1952.

Monthly List of Russian Accessions Library of Congress November 1952. Unclassified.

SAZONOVA, N.

Razumov, A., Kukhtin, V., Sazonova, N. - "Reactions of some halogen compounds of phosphorous with glycolic acids esters." (p. 920)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii, 1952, Vol. 22, No. 6

SAZANOVA, N. A., VASHKOV, V. I. and VOLKOVA, A. P.

"Toxicity of NIUIF-100 (diethylparanitrophenyl thiophosphate) [Thiophos]
for Warm-Blooded Animals".

Tr. Tsentr N-I Desinfekts In-ta, No. 8, pp 188-192, 1954.

Doses of NIUIF-100 (I) equal to 8, 12, 20, and 50 mg/kg cause 100% destruction of cats, guinea pigs, white mice, and rabbits.

In daily dosage of cats with (I) in a concentration of 5-1 mg/kg, death occurred after three to eight doses; death occurred 50-80 days after a dose of 0.2 mg/kg. The feeding of grain containing 50 mg/kg did not cause toxic phenomena in white mice in the course of 6 months. Upon application of 1.0-0.75 ml/kg technical (I), white mice and white rats died within an hour, and rabbits within 10-20 hours. A dog died after four applications on the skin of 0.25 ml/kg (I). In application on rabbit skin of a 2% aqueous emulsion of (I) containing 50-20 mg/kg of active agent, the animals died after 15-40 treatments. Guinea pigs died after 40-47 treatments with a 10 mg/kg dose. Daily moistening of the surface of the skin with an 0.08% (according to active agent) aqueous emulsion of (I) did not cause toxic phenomena in the course of 10 days. Upon evaporation of 0.5 g/m³ (I), mice were 100% destroyed but rabbits survived. After four treatments with a dose of 2.5 g/m³ the rabbits died. Daily spraying of the surface of the skin for 5 days with a 1% (according to active agent) aqueous emulsion of (I) in an account of 120 ml/m² did not cause toxic phenomena in rabbits, but 30% of the mice died.

1/2

Upon daily dusting over a period of 6 months of a 1% dust of (I) in the dosage recommended for application (20 mg/ga), no toxic effect on mice was shown. Multiplication of the dust by 5, (100 kg/ha), caused marked toxic effect in mice. (RZhBiol, No. 10, 1955)

SO: Sum No 884, 9 Apr 1956.

2/2

Sazonova, N. A.

✓ The toxicity of anabasine to warm-blooded animals. N. A. Sazonova and A. P. Volkova. *Trudy Tsentral. Nauch. Issledovatel. Dezinfekt. Inst.* 1954, No. 8, 193-202; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 503. — The preps. were used in the form of solns., ointments, soap, aerosol, and dust, and applied to skin, hair, per os, and as cutaneous injection. N. S. Levina

SAZONOVA, N. A.

USSR/ Medicine - Physiology

Card 1/1 Pub. 22 - 46/49

Authors : Gar, K. A.; Sazonova, N. A.; and Fadeyev, Yu. N.

Title : Decomposition and separation of diethyl-4-nitrophenylthiophosphate from the organism of a rabbit during intravenous introduction

Periodical : Dok. AN SSSR 102/1, 185-187, May 1, 1955

Abstract : Experiments were conducted on rabbits injected intravenously with a toxic phosphor-organic compound (diethyl-4-nitrophenylthiophosphate) to determine the rate of decomposition of the toxin and its separation from the living organism of the animal. Results obtained are listed. Five USA references (1950-1953). Graph.

Institution : Sc. Res. Inst. of Fertil. and Insectofungicides im. Ya. V. Samoylov

Presented by : Academician Ye. N. Pavlovskiy, December 29, 1954

Translation D 457707
" D383035

Sazonova, N. A.

USSR/ Medicine - Physiology

Card 1/1 Pub. 22 - 46/46

Authors : Gar, K. A.; Sazonova, N. A.; and Fadeyev, Yu. N.

Title : Penetration of dimethyl-4-nitrophenylthiophosphate into the blood stream and its effect on the activity of cholinesterase during oral poisoning of rabbits

Periodical : Dok. AN SSSR 103/1, 173-176, Jul 1, 1955

Abstract : Experiments were conducted on rabbits to determine the degree of penetration of dimethyl-4-nitrophenylthiophosphate (administered orally) into the blood stream of the animals and to study its effect on the activity of cholinesterase during the poisoning of the rabbits. Results are described. Eleven references: 8 USA and 3 Eng. (1951-1953). Table; graphs.

Institution : Sc. Inst. on Fertil. and Insectofungicides im. Ya. V. Samoylov

Presented by: Academician V. A. Engel'gardt, April 12, 1955

Translation D457707
D383035

5(3)

SOV/63-4-1-26/31

AUTHORS: Zil'berman, Ye.N., Kulikova, A.Ye., Sazanova, N.A.

TITLE: Method for Preparing Amides From Nitriles (Sposob polucheniya amidov iz nitrilov)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 1, pp 135-136 (USSR)

ABSTRACT: A convenient method for the transformation of nitriles to amides in the cold and in the presence of hydrogen chloride is shown here. The interaction product of 1 mole of benzonitrile and two moles of hydrogen chloride is treated with 1 mole of water which produces the compound $C_6H_5CONH_2 \cdot HCl$. On dissolving it in water it is transformed into benzamide. The hydration reactions of nitriles proceed not only in ether, but also in other organic solvents, like dioxane, benzene, CCl_4 , etc. There are 2 references, 1 of which is Soviet and 1 German.

SUBMITTED: July 21, 1958

Card 1/1

KULIKOVA, A.Ye.; ZIL'BERMAN, Ye.N.; SAZANOVA, N.A.

Synthesis of amides and their hydrochlorides from nitriles.

Zhur.ob.khim. 30 no.7:2180-2183 J1 '60.

(MIRA 13:7)

(Amides) (Nitriles)

SAZONOVA, N.A.; MERGOL'D, L.B.; OREL, M.A.

Concentration of Central Asian phosphorites. Khim. prom.
no. 4:249-251 Ap '64. (MIRA 17:7)

LYUBASHENKO, S.Ya., prof.; ADAYKIN, P.V.; BAKHTIN, A.G., kand. veter. nauk;
NIKITIN, I.N., veterinarnyy vrach (Irkutskaya oblast'); SAZONOV,
Yu.I., veterinarnyy vrach (Irkutskaya oblast'); SAZONOVA, N.A.,
veterinarnyy vrach (Irkutskaya oblast')

Leptospirosis of farm animals. Veterinariia 41 no.7:36-42
Jl '64. (MIRA 18:11)

1. Nachal'nik veterinarnogo otdela Ul'yanovskogo oblastnogo
upravleniya proizvodstva i zagotovok sel'skokhozyaystvennykh
produktov (for Adaykin). 2. Vsesoyuznyy institut eksperimental'-
noy veterinarii (for Bakhtin).

U S S R

539,614
5052. Relation between gross and rehabilitation of
Addresses: L. A. ROSS, U. V. SEROKIN (and N. D.)
SAZHEN'S. Du. 11.11.1957. 92, 1957

at constant strain are considered to be two special cases of creep under arbitrary stress variations and attempts to relate curves for the two are made. It is shown that the variations with heat treatment for each is consistent, in certain steels, with this view, and it is concluded that a steel cannot be resistant to creep and not to stress relaxation. W. M. LORGE

Test machine studies AS U.S.R.

LM

see p. 53 to 54

Best in: "A Review of the world Literature on the Creep of Metals at Elevated Temperatures," in Library IV, pp. 53 to Dec 54.

Sazonova, N. D.

137-1957-12-24893

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 277 (USSR)

AUTHOR: Sazonova, N. D.

TITLE: On a Criterion of Aging of Austenite Steels (Ob odnom kriterii starenii austenitnykh staley)

PERIODICAL: V sb.: Prochnost metallov. Moscow, AN SSSR, 1956, pp 133-136

ABSTRACT: The kinetics of aging of three grades of steel (EI-69, EI-257, and EI-395) was investigated by means of plotting the curves for changes in volume. The heat treatment of specimens ($\ell_p = 200$ mm, $d_p = 10$ mm) consisted of water quenching from a temperature of $1150 \pm 10^\circ$. Machines of the IP-2 type were employed in measuring the changes in volume. The aging was carried out between $600-800^\circ$. An investigation was carried out to determine the effect of deformation and preliminary annealing (at temperatures lower than the temperature of aging) on the kinetics of the aging process. It was established that preliminary annealing, at temperatures below the operational temperature, is essential in order to avoid additional stresses and to ensure dimensional stability. The speed of the aging process increases both with

Card 1/2

137-1957-12-24893

On a Criterion of Aging of Austenite Steels

stress and with an increase in temperature. It is shown that the instant of the establishment of a relatively stable structure may be determined with sufficient accuracy from the curves of the changes in volume.

T. M.

1. Austenitic steel-Aging-Analysis treatment
2. Austenitic steel-Heat treatment

Card 2/2